

Claims

- [c1] 1. A portable micro-control device for inserting a plurality of input/output slave devices, the micro-control device comprising:
- viewer for displaying an output data;
 - an input device for receiving a work command signal;
 - a power supply for providing power to the micro-control device; and
 - a controller coupled to the viewer and the input device, wherein the controller at least comprises a plurality of input/output ports for connecting with the input/output slave devices,
- wherein the viewer in the micro-control device displays the stored data and related data inside the input/output slave devices once the input/output slave devices are inserted into the micro-control device, and operates on the data stored inside the input/output slave devices according to a work command signal.
- [c2] 2. The micro-control device of claim 1, wherein the input/output ports are universal serial bus (USB) ports.
- [c3] 3. The micro-control device of claim 1, wherein the viewer comprises a liquid crystal display.

- [c4] 4. The micro-control device of claim 1, wherein the input device has a set of buttons including an "up" button, a "down" button, a "right" button, a "left" button and at least an "enter" button.
- [c5] 5. The micro-control device of claim 1, wherein after a first device has been inserted into one of the input/output ports, the controller determines if the first device matches the input/output standard, then determines if the first device receives any power, then sets the initialization values of the first device, then assigns memory address to the first device, then set the state configuration of the first device and finally determines if the first device is successfully connected.
- [c6] 6. The micro-control device of claim 1, wherein the standard operation includes copying, transferring, backing up, deleting, editing or formatting the data stored inside the input/output slave devices.
- [c7] 7. A controller for a portable micro-control device, comprising:
power module for providing electrical power;
a plurality of input/output ports for connecting with a plurality of input/output slave devices;
a mini-root hub coupled to the input/output ports for

transmitting the data stored inside the input/output slave devices;
a local buffer module coupled to the mini-root hub for holding some of the data temporarily;
an output controller for driving a viewer;
an input controller for receiving a work command signal from an input device; and
a processor coupled to the output controller, the input controller and the local buffer module, wherein the processor performs an operation on the data stored inside the input/output slave devices according to the work command signal.

- [c8] 8. The controller of claim 7, wherein the input/output ports are universal serial bus (USB) ports and the mini-root hub supports the universal serial bus.
- [c9] 9. The controller of claim 8, wherein the mass data transmits in a bulk mode.
- [c10] 10. The controller of claim 7, wherein the input/output ports include serial ATA ports.
- [c11] 11. The controller of claim 7, wherein the local buffer module is connected to an external memory device.